



Attorney Docket: UCONAP/141/US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of: Alexandros Makriyannis et al

Application No.: 09/328,742 Examiner: Pryor, Alton Nathaniel

Filing Date: 06/06/1999 Group Art Unit: 1616

For: Inhibitors of the Anandamide Transporter

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Sir:

Information Disclosure Statement

Applicant submits herewith patents, publications or other information of which they are aware and which they believe may be material to the examination of the above-identified application and in respect of which there may be a duty to disclose in accordance with 37 CFR 1.56.

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Respectfully submitted,

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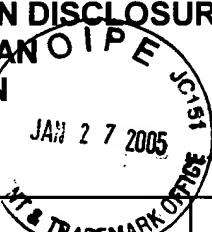
INFORMATION DISCLOSURE CITATION IN AN APPLICATION <small>JAN 27 2005</small> <small>U.S. PATENT & TRADEMARK OFFICE</small>	Application No. 09/328,742	Inventor Alexandros Makriyannis et al	
	Title Inhibitors of the Anandamide Transporter		
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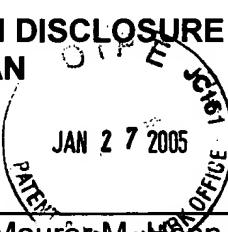
UNITED STATES PATENT DOCUMENTS

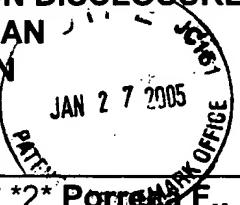
Examiner Initial - date	Document No.	Date	Name		Class
	09/698,071	10/30/00	Fride et al, (copy not included, this is the parent application for US Publication No. 2002/0173528, enclosed herewith)		
	2002/0173528	11/21/02	Fride et al		
	3838131	9/24/74	Gauthier		
	3946029	3/23/76	Descamps et al		
	5631297	5/20/97	*1* Pate et al		
	5939429	8/17/99	Kunos et al		

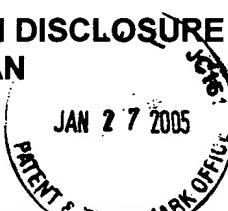
FOREIGN PATENT DOCUMENTS

Examiner Initial - date	Document No.	Date	Country	Name	Translation
	EP0444451	9/4/91	EP	Sterling Drug (English bibliography, abstract and cover page, appears equivalent to US5068234 which was previously cited)	
	EP0576357	12/29/93	EP	Barth et al (including English bibliography and abstract)	no
	EP0737671	10/16/96	EP	Takeda Chemical Industries, front page only (bibliography, appears equivalent to US 5804601)	
	IL1995-113228	9/22/99	IL	*1* R. Mechoulam et al (abstract only)	
	WO 02/058636	8/1/02		Makriyannis et al	English
	WO 02/060447	8/8/02		Makriyannis et al	English
	WO 99/57106	11/11/99		Makriyannis et al	English
	WO 97/21682	6/19/97		Barth et al (including bibliography, appears equivalent to US5925768)	no
	WO 94/12466	06/94		*1* Yissum Research Development Co.	English

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)				
Examiner Initial - date				
	<p>*2* Brotchie JM: Adjuncts to dopamine replacement a pragmatic approach to reducing the problem of dyskinesia in Parkinson's disease. <i>Mov. Disord.</i> (1998)13:871-876. (abstract only)</p>			
	<p>Compton D.R. et al; "Pharmacological Profile Of A Series Of Bicyclic Cannabinoid Analogs: Classification as Cannabimimetic Agents"; <i>J. Pharmacol. Exp. Ther.</i>; 260; 201-209; 1992. (abstract only)</p>			
	<p>*2* Dodd, P.R. et al, A Rapid Method for Preparing Synaptosomes: Comparison with Alternative Procedures, <i>Brain Res.</i>, 226, 107 - 118 (1981). (abstract only)</p>			
	<p>*2* Green K.; "Marijuana smoking vs. cannabinoids for glaucoma therapy."; <i>Arch. Ophthalmol.</i> (1998) Nov. 116(11); 1433-1437. (abstract only)</p>			
	<p>Griffin, G., Wray, E. J., Tao, Q., McAllister, S. D., Rorrer, W. K., Aung, M., Martin, B. R., Abood, M. E.; "Evaluation of the cannabinoid CB2 receptor selective antagonist, SR144528: further evidence for cannabinoid CB2 receptor absence in the rat central nervous system"; <i>European Journal of Pharmacology</i>; (1999); vol. 377; 117-125.</p>			
	<p>*1* Hanus et al; "Two new unsaturated fatty acid ethanolamides in brain that bind to the cannabinoid receptor"; <i>Journal of medicinal Chemistry</i>; 36(20); 3032-3034; 1993</p>			
	<p>Jbilo, O., Derocq, J., Segui, M., Le Fur, G., Casellas, P.; "Stimulation of peripheral cannabinoid receptor CB2 induces MCP-1 and IL-8 gene expression in human promyelocytic cell line HL60"; <i>FEBS LETTERS</i>; (1999); vol. 448; no. 21848; 273-277</p>			
	<p>*2* Joy JE, Watson SJ, Benson JA; "Marijuana and Medicine Assessing the Science Base"; National Academy Press, Washington, DC, USA (1999). (abstract only)</p>			
	<p>*1* Lang, W. et al; "Substrate Specificity and Stereoselectivity of Rat Brain Microsomal Anandamide Amidohydrolase"; <i>J. Med. Chem.</i>; vol. 42(5); 896-902; (1999)</p>			
	<p>*1* Lang, W., Qin, C., Hill, W.A., Lin, S., Khanolkar, A.D., Makriyannis, A.; High-Performance Liquid Chromatographic Determination Of Anandamide Amidase Activity in Rat Brain Microsomes; <i>Anal. Biochem</i>; (1996), 238, 40-45 (abstract only)</p>			

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Filing Date 06/06/1999		Group Art Unit 1616		Docket No. UCONAP/141/US		
<p>*2* Maurer-McKenn V, Dittrich A, Hofmann A.; "Delta-9-tetrahydrocannabinol shows antispastic and analgesic effects in a single case double-blind trial."; Eur. Arch. Psychiat. Clin. Neurosci. (1990), 240:1-4. (abstract only)</p>						
<p>*1* Mechoulam et al; Structural Requirements for Binding of Anandamide Type Compounds to the Brain Cannabinoid Receptor; J. Med. Chem.; 1997; 40; 659-667.</p>						
<p>*1* Mechoulam et al; "Towards Cannabinoid drugs - Revisited"; Progress in Medicinal Chemistry; 35; 199-243; 7/3/1998</p>						
<p>Meschler, J. P., Kraichely, D. M., Wilken, G. H., Howlett, A. C.; "Inverse Agonist Properties of N-(Piperidin-1-yl)-5-(4-chlorophenyl)-1-(2,4-dichlorophenyl)-4-methyl-1H-pyrazole-3-carboxamide HCL (SR141716A) and 1-(2-Chlorophenyl)-4-cyano-5-(4-methoxyphenyl)-1H-pyrazole-3-carboxylic Acid Phenylamide (CP-272871) for the CB1 Cannabinoid Receptor"; Biochemical Pharmacology; (2000); vol. 60; no. 9; 1315-1322.</p>						
<p>Melvin et al; "Structure-Activity Relationships Defining the ACD-Tricyclic Cannabinoids Cannabinoid Receptor Binding and Analgesic Activity"; Drug Design and Discovery; 13(2); 155-166 (1995). (abstract only)</p>						
<p>*2* Muller-Vahl KB, Kolbe H, Schneider U, Emrich, HM Cannabis in movement disorders. Porsch. Kompicmentarmed (1999) 6 (suppl. 3) 23-27. (abstract only)</p>						
<p>*2* Muller-Vahl KB, Schneider U, Kolbe H, Emrich, HM.; "Treatment of Tourette's syndrome with delta-9-tetrahydrocannabinol." Am. J. Psychiat.; (1999); 156(3); 495.</p>						
<p>Pacheco M, et al; "Aminoalkylindoles: Actions On Specific G-Protein-Linked Receptors"; J. Pharmacol. Exp. Ther.; vol. 257, no. 1, pp. 170-183 and 172 Table (1991).</p>						
<p>*1* *2* Palmer et al; "Natural and Synthetic Endocannabinoids and Their Structure-Activity Relationships"; Current Pharmaceutical Design; 6; 1381-1397; (2000)</p>						
<p>*1* Pertwee et al; "Inhibitory effects of certain enantiomeric cannabinoids in the mouse vas deferens and the myenteric plexus preparation of guinea-pig small intestine"; Br. J. Pharmacol.; 105(4); 980-984 (1992). (abstract only)</p>						
<p>*1* Pinto et al; Cannabinoid Receptor Binding and Agonist Activity of Amides and Esters of Arachidonic Acid; Mol. Pharmacol.; 1994; 46(3); 516-522. (abstract only)</p>						

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1 *2* Porreca F., Mosberg H.I., Hurst R., Hruby V.J., Burks T.F.; "Roles of mu, delta and kappa opioid receptors in spinal and supraspinal mediation of gastrointestinal transit effects and hot-plate analgesia in the mouse"; J. Pharmacol. Exp. Ther.; 230(2); 341-348; (1994). (abstract only)				
Quere, L., Boigegrain, R., Jeanjean, F., Gully, D., Evrard, G., Durant, F.; "Structural requirements of non-peptide neuropeptidin receptor antagonists"; J. Chem Soc., Perkin Trans. 2, (1996); 2639-2646.				
1 Razdan et al; "Pharmacological and Behavioral Evaluation of Alkylated Anandamide Analogs"; Life Sci.; 1995; 56(23-24); 2041-2048 (abstract only)				
2 Rice AS. Cannabinoids and pain. Curr Opin Investig Drugs. 2001 Mar;2(3):399-414. (abstract only)				
1 *2* Serdarevich B., Carroll K.K., "Synthesis and characterization of 1- and 2-monoglycerides of anteiso fatty acids"; J. Lipid Res.; 7; 277-284; (1966)				
2 Shen M. Thayer SA: Cannabinoid receptor agonists protect cultured rat hippocampal neurons from excitotoxicity. Mol. Pharmacol (1996) 54:459-462.				
1 Sheskin, T. et al; Structural Requirements for Binding of Anandamide Type Compounds to the Brain Cannabinoid Receptor; J. Med. Chem.; 1997; 40; 659-667				
2 Simiand J, Keane M, Keane PE, Soubrie P: SR 141716, A CB1 cannabinoid receptor antagonist, selectively reduces sweet food intake in marmoset. Behav. Pharmacol (1998) 9:179-181. (abstract only)				
2 Terranova J-P, Storme J-J, Lafon N et al; "Improvement of memory in rodents by the selective CB1 cannabinoid receptor antagonist, SR 141716"; Psycho-pharmacol (1996) 126:165-172 (abstract only)				
Tetko, I. V. et al; "Volume Learning Algorithm Artificial Neural Networks For 3D QSAR Studies"; J. Med. Chem.; vol. 44, no. 15 (2001) pp. 2411-2420, 2413, 2414 Table 1.				
2 Ueda, N., Endocannabinoid hydrolases. Prostaglandins & Other Lipid Mediators 2002;68-69:521-534 (abstract only)				
2 Vogel Z., Barg J., Levy R., Saya D., Heldman E., Mechoulam R.; "Anandamide, a brain endogenous compound, interacts specifically with cannabinoid receptors and inhibits adenylate cyclase"; J. Neurochem.; 61(1) 352-355; (1993) (abstract only)				

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		2 Wagner JA, Varga K, Jarai Z, Kunos G; "Mesenteric Vasodilation Mediated by Endothelia Anandamide Receptors"; Hypertension (1999) 33:429-434.		
Examiner		Date Considered		
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.				